

## INTERNATIONAL SEARCH REPORT

Inte Application No  
PC I/US2004/027967

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/11 C12N9/12 C12N15/54 C07K16/40 A61K31/7088  
A61K39/00 G01N33/50 C12Q1/48 A01K67/027

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K A61K A01K G01N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, Sequence Search

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 291 430 A (SANKYO CO) 12 March 2003 (2003-03-12) page 2, lines 50,51 page 3, paragraph 9 page 4, paragraphs 17,19 page 9, paragraph 68-97 - page 13 -----	9,12-15, 30-34
P,X, L	PETTUS B.J. ET AL.: "Ceramide Kinase mediates cytokine- and calcium ionophore-induced arachidonic acid release" THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 278, no. 40, 3 October 2003 (2003-10-03), pages 38206-38213, XP002306609 L: published online on July 10, 2003 page 38202 ----- -/--	1,3

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

22 November 2004

Date of mailing of the international search report

08/12/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/28906 A (BAYER AKTIENGESELLSCHAFT (DE); KOSSIDA SOPHIA; ENCINAS JEFFREY) 11 April 2002 (2002-04-11) the whole document	4-13, 30-34
A	SUGIURA MASAKO ET AL: "Ceramide kinase, a novel lipid kinase. Molecular cloning and functional characterization" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 277, no. 26, 28 June 2002 (2002-06-28), pages 23294-23300, XP002277638 ISSN: 0021-9258 the whole document	

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### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 4-8 and 11-15 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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International application No.

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## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☒ in written format
    - ☒ in computer readable form
  - c. time of filing/furnishing
    - ☐ contained in the international application as filed
    - ☐ filed together with the international application in computer readable form
    - ☒ furnished subsequently to this Authority for the purpose of search
2. ☒ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Inte

Application No

PCT/US2004/027967

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1291430	A	12-03-2003	AU 6273401 A	24-12-2001
			CA 2412876 A1	13-12-2002
			EP 1291430 A1	12-03-2003
			US 2003162206 A1	28-08-2003
			WO 0196575 A1	20-12-2001
			JP 2002330773 A	19-11-2002
WO 0228906	A	11-04-2002	AU 2359302 A	15-04-2002
			WO 0228906 A2	11-04-2002
			EP 1326986 A2	16-07-2003
			JP 2004510429 T	08-04-2004
			US 2004192580 A1	30-09-2004
			US 2003125533 A1	03-07-2003